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FOR THE NEW YEAR.

We give first place to an enthusiast who is not unknown to the readers of the Bulletin. Superintendent Hard not only furnishes the text, but also the illustrations which were made under his supervision. It is a brief treatment of the large and interesting genus Tricholoma, but more space at present could not be placed at the disposal of the author. Half-tones of some of the other species will be given later.

It is hoped too that another characteristic photograph may be furnished during the year of Volvaria bombycina. An illustration is needed of the too perishable plant when it reaches the climax of its glory.

The Frontispiece.—There are many eminent French mycologists—in fact, I doubt whether any other country than France can furnish so long and honorable list of scientific men who have paid attention to Mushrooms. The first representative which we select is M. le Professeur Dr. N. Patouillard.

THE GENUS TRICHOLOMA AND SOME OF THE OHIO SPECIES.

Supt. M. E. Hard.

The generic name TRICHOLOMA, comes from two Greek words meaning *hair* and *fringe.*

In this genus the veil is absent or, if present, it is floccose and adheres to the margin of the pileus. The volva and ring are both wanting. The pileus is generally symmetrical and is never umbilicate and rarely umbonate. The gills are attached to the stem and are more or less strongly notched or sinuate at the stem. The stem is fleshy-fibrous, rather short and stout, without a bark-like skin as in the Collybia. It is homogeneous and confluent with the cap. The gills are white or dingy and frequently spotted. The caps may be smooth, scaly, dry, moist or water soaked.

The distinguishing feature of the Tricholoma is the *sinuate gills.* There are a number of species of the Tricholomas. I have found thirty-one species about Chillicothe. Of these but one, according to my experience, is not edible, *Tricholoma sulphureum.* The plants occur from May to freezing weather. A few of the species are here described and illustrated.

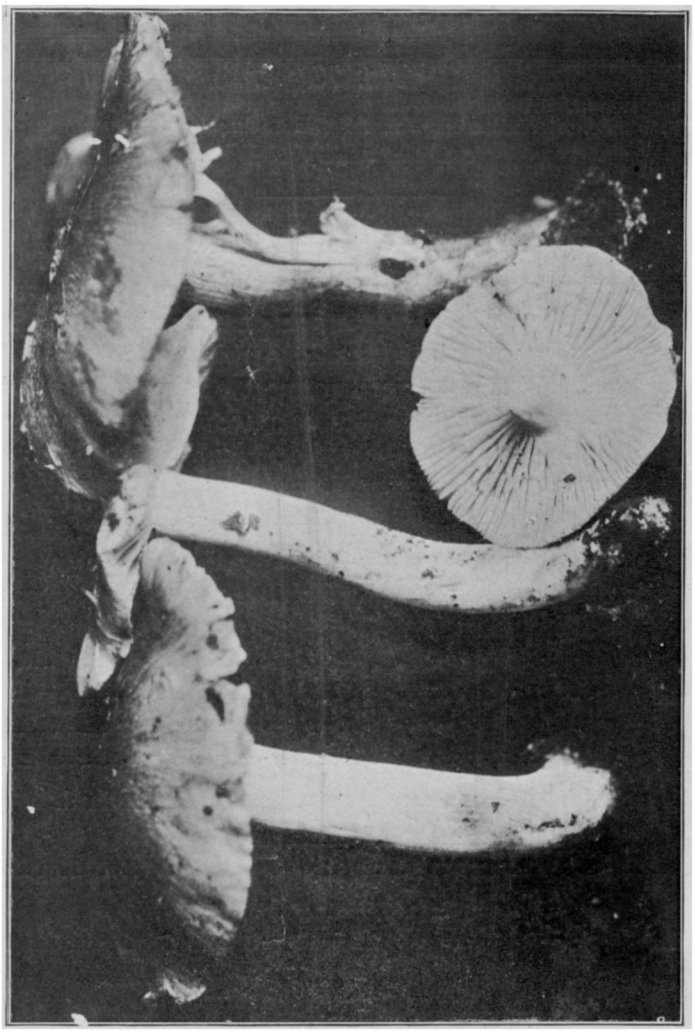

Fig. 221. Tri-cho-lo'-ma se-junc'-tum. See text for explanation.

TRICHOLOMA SEJUNCTUM Sow.

This is called *sejunctum* because the gills easily separate from the stem. It is a beautiful plant growing in beech woods among the leaves.

The caps two to three inches broad, convex, then expanded, broadly umbonate, viscid when moist, light yellow in color, streaked with black fibres, margin of the cap thin, odor frequently strong, taste mild.

The gills are notched at the stem, broad, rather distant, white, easily separating from the stem.

The stem is solid, smooth, stout, often swollen in the middle. Spores

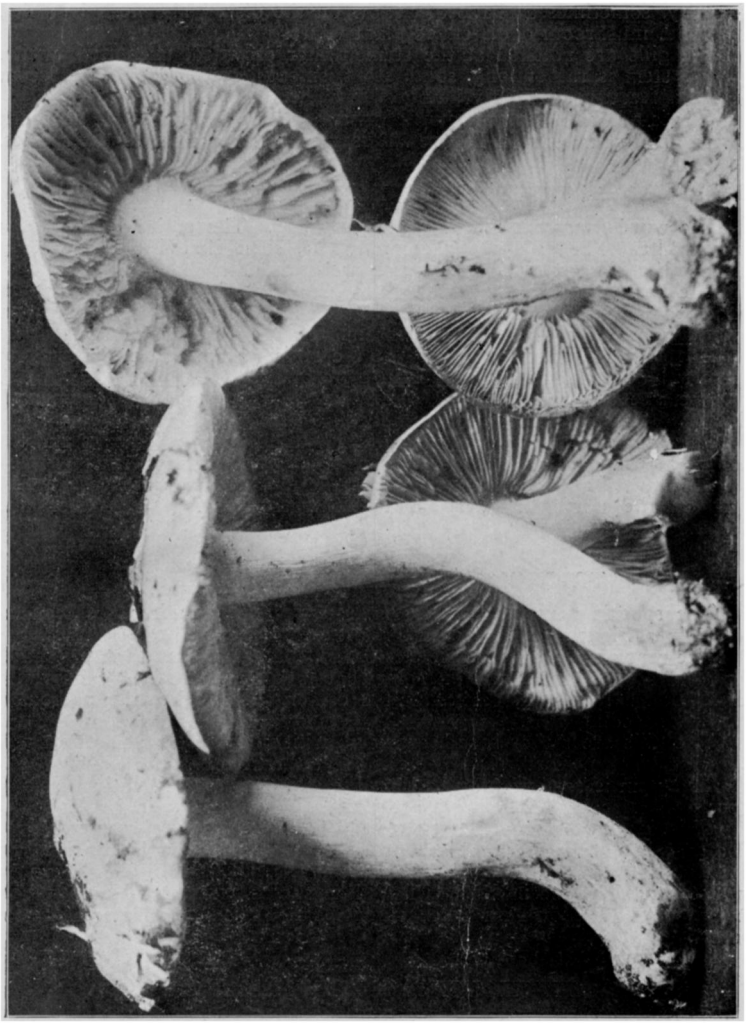

Fig. 222. Tri-cho-lo'-ma re-splen'-dens. See text for explanation.

are nearly spherical, 6μ. Its peculiar yellow color will distinguish the species. The taste of our plants is mild when raw and the flavor is excellent when cooked.

TRICHOLOMA RESPLENDENS Fr.

The significance of *resplendens* : *shining brightly,* and this species is called the *Shining Tricholoma.* It is edible and a very good flavored plant.

The caps are convex, then expanded until quite plane, viscid, shining

when dry, sometimes a shade of yellow on the disk. The flesh is white, taste mild, mushroom odor, entire plant white.

The gills are notched at the stem, rather crowded, unspotted, white.

The stem is rather long, solid, stout, smooth, sometimes flocculose at the apex, frequently slightly bulbous, even, white.

This is a beautiful plant found growing in mixed woods on a northern hillside among leaves. In Figure 222 is given a sample set of the species.

TRICHOLOMA FUNESCENS PK.

The word *funescens* means *growing smoky.* The entire plant is of a dingy white. The gills are a cream white, soon changing to a smoky color with a blue or blackish color where bruised.

The caps are two to three inches broad, at first convex, then expanded and frequently wavy as will be seen in a Figure to be given later, dry, dingy white, with a fine tomentum.

The gills are narrow, notched at the stem, cream color, changing to a smoky blue or blackish where bruised, crowded.

The stem is short, round, sometimes slightly tapering downward, whitish. The spores are oblong-elliptical, 5-6.5 μ.

This species will be readily identified by the fine crowded gills and the smoky blue or blackish hue they assume when bruised or in age.

They are found in mixed woods on the ground among leaves. I find them on the north hillsides about Chillicothe, during September and November.

TRICHOLOMA SQUARRULOSUM BRES.

The specific name, *squarruolsum,* means *full of scales;* the caps, as shown in a Figure to be given later, are very scaly.

The caps are two to three inches broad, convex at first, then expanded, slightly wavy at times, margin somewhat involute at first, dry brownish tinge, then a lurid tan, darker in the center of disk, broadly umbonate, margin exceeding gills.

The gills are rather broad, crowded, whitish gray, changing to a reddish color when bruised, slightly notched at the stem.

The stem is somewhat paler than the pileus, two to three inches long, more or less scaly. The spores are elliptical, 7-9 x 4-5 μ.

This is an attractive plant growing in mixed woods among leaves. The caps are covered with black or reddish black squamules, which give rise to the name of the species. I have only succeeded in finding the plant in October. The specimens which will be shown in a later Number were found in Poke Hollow near Chillicothe, Ohio. They are edible and of good flavor.

TRICHOLOMA TERREUM SCHAEFF.

The word *terreum* is from Latin *terra,* the *earth;* so-called because of its color. It is known as the *Gray Tricholoma;* however, it is quite variable both in size and color, as well as in the manner of growth.

The pileus is usually dry, fleshy, two to three inches broad, often umbonate, grayish-brown or mouse-color.

The gills are adnexed, not close, white, becoming grayish.

The stem is one to three inches high, whitish, fibrillose, paler than the cap.

I find this plant on the north hillsides in beech woods. It is not plentiful about Chillicothe. There are several varieties of this species. It is edible and the time for its appearance is September to November.

Fig. 223. Tri-cho-lo'-ma ter'-re-um. See text, opposite page.

VOLVARIA BOMBYCINA.

M. E. Hard.

This is one of our most interesting plants. Its manner of growth will interest any one. The cut represents the plant when in the egg state. The volva or wrapper, mottled brown color, quite viscid. It soon breaks open at the top as will be seen in the cut. The volva has a silky appearance, but the cap or pileus is at first a pure silky white as will be seen in the figure where the volva has begun to fracture.

The plant grows quite large about Chillicothe. I frequently find it ten inhces broad. It is entirely white, fleshy, at first round or oblong, then bell-shaped, then convex, everywhere silky but when old it is apt to be hairy scaled. The flesh is rather thin and white.

The gills are not attached to the stem and very close together, broader in the center, flesh color as soon as the spores begin to drop.

The stem three to six inches long, solid, smooth, white, tapering from the base to apex.

The volva is soon split at the apex, membranaceous, viscid and persistent. The spores are elliptical.

It is usually found solitary, but sometimes a number will be found growing from the same log. I have frequently seen a dozen growing from a hollow beech log where the plants in Figure 224 were found. It is found growing in hollow trees, on decayed shade trees, or on decayed branches in the woods. I have never eaten it but Dr. Curtis gives it as edible in his list of edible mushrooms. It is found from July to October. I found a specimen that measured eight inches across the cap Saturday, September 29, 1906.